Bob J. Grover
Bremen Corporation
405 North Industrial Drive
Bremen, Indiana 46506

Re: 099-12291
Minor Permit Modification to:
Part 70 permit No.: T099-7476-00033

Dear Bob J.Grover:

Bremen Corporation was issued a permit on December 9, 1999 for operation of a stationary vinyl-coated foam product manufacturing source. A letter requesting changes to this permit was received on May 11, 2000. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

(a) One(1) Roll Coater identified as Process 5, with a maximum capacity of 106.6 pounds per hour of adhesive usage.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Gurinder Saini, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Gurinder Saini or extension (3-0203), or dial (317) 233-0203.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
GS
cc: File - Marshall County
U.S. EPA, Region V
Marshall County Health Department
Northern Regional Office
Air Compliance Section Inspector Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT
# OFFICE OF AIR MANAGEMENT

## Bremen Corporation
## 405 North Industrial Drive
## Bremen, Indiana 46506

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| | |
|---|---|
| Operation Permit No.: T 099-7476-00033 | |
| Issued by:<br>Janet G. McCabe, Assistant Commissioner<br>Office of Air Management | Issuance Date: December 9, 1999 |

| | |
|---|---|
| First Minor Permit Modification T099-12291 | Pages Affected: 6<br>Pages Added: 35a, 35b, 35c and 35d |
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: |

(f) One (1) assembly area, known as Area 2, consisting of hand application of adhesive, exhausting to stack 13, capacity: 14.9 pounds of adhesives per hour.

(g) One (1) final finish area, known as Area 3, consisting of one (1) automatic silk screener and one (1) manual silk screener, capacity: 4.12 pounds of ink per hour.

(h) One (1) Roll Coater identified as Process 5, with a maximum capacity of 106.6 pounds per hour of adhesive usage.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:

(1) Two (2) natural gas fired hot water boilers, capacity: 0.28 million British thermal unit per hour, each. [326 IAC 6-2-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

**SECTION D.3 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]**

(h) One(1) Roll Coater identified as Process 5, with a maximum capacity of 106.6 pounds per hour of adhesive usage.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.3.1 Volatile Organic Compounds (VOC) Limit [326 IAC 8-1-6]

(a) The roll coater identified as Process 5 shall use less than a total of twenty-five (25) tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, rolled monthly. This usage limit is required to limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6 (New facilities: general reduction requirement) not applicable.

(b) Any change or modification which may increase actual VOC usage to twenty-five (25) tons per year or more from the roll coater, will make the facilities subject to 326 IAC 8-1-6.

D.3.2 HAPs Limitations [326 IAC 2-4.1-1] [326 IAC 2-8]

(a) The worst case single HAP delivered to the roll coater, shall be less than ten (10) tons per twelve (12) consecutive month period, rolled monthly. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

(b) The combination of HAPs delivered to the roll coater, shall be less than a total of twenty-five (25) tons per twelve (12) consecutive month period, rolled monthly. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

D.3.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

**Compliance Determination Requirements**

D.3.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAPs usage limitations contained in Conditions D.3.1 and D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.3.5 VOC and HAPs Emissions

Compliance with Conditions D.3.1 and D.3.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compounds, worst case single HAP and combination of HAPs usage for the most recent month and twelve (12) month period.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.3.6 Record Keeping Requirements

(a) To document compliance with Conditions D.3.1 and D.3.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage as well as the VOC and HAPs emission limits established in Conditions D.3.1 and D.3.2.

(1) The amount of VOC and HAPs of each material used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.7 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.1 and D.3.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR MANAGEMENT
## COMPLIANCE DATA SECTION
## Part 70 Quarterly Report

Source Name: Bremen Corporation
Source Address: 405 North Industrial Drive, Bremen, Indiana 46506
Mailing Address: 405 North Industrial Drive, Bremen, Indiana 46506
Part 70 Permit No.: 099-7476-00033
Facility: Process 5
Parameter: VOC emissions
Limit: Less than 25 tons per year, based on a twelve (12) month rolling total.

YEAR:

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR MANAGEMENT
## COMPLIANCE DATA SECTION
## Part 70 Quarterly Report

Source Name: Bremen Corporation
Source Address: 405 North Industrial Drive, Bremen, Indiana 46506
Mailing Address: 405 North Industrial Drive, Bremen, Indiana 46506
Part 70 Permit No.: 099-7476-00033
Facility: Process 5
Parameter: HAP (MEK) emissions
Limit: Less than 10 tons per year, based on a twelve (12) month rolling total.

YEAR:

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

# Indiana Department of Environmental Management
# Office of Air Management

# Technical Support Document (TSD) for a Part 70 Minor Permit Modification

**Source Background and Description**

| | |
|---|---|
| **Source Name:** | **Bremen Corporation** |
| **Source Location:** | **405 North Industrial Drive, Bremen, IN 46506** |
| **County:** | **Marshall** |
| **SIC Code:** | **3069** |
| **Operation Permit No.:** | **T099-7476-00033** |
| **Operation Permit Issuance Date:** | **December 9, 1999** |
| **Minor Source Modification No.:** | **099-12291-00033** |
| **Permit Reviewer:** | **Gurinder Saini** |

The Office of Air Management (OAM) has reviewed a modification application from Bremen Corporation relating to the construction of the following emission units and pollution control devices:

(a) One(1) Roll Coater identified as Process 5, with a maximum capacity of 106.6 pounds per hour of adhesive usage.

This unit is added in Section A.2 under (h) on page 6 and Section D.3 on pages 35a, 35b, 35c and 35d in the permit.

**History**

On May 11, 2000, Bremen Corporation submitted an application to the OAM requesting to add roll coater to their existing plant. Bremen Corporation was issued a Part 70 permit on December 9, 1999.

**Enforcement Issue**

There are no enforcement actions pending.

**Recommendation**

The staff recommends to the Commissioner that the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 11, 2000.

**Emission Calculations**

See Appendix A page 1 and 2 of this document for detailed emissions calculations

**Potential To Emit of Modification**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as Athe maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.@

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|---|---|
| PM | 0.0 |
| PM-10 | 0.0 |
| $SO_2$ | 0.0 |
| VOC | 397.0 |
| CO | 0.0 |
| $NO_x$ | 0.0 |

| HAPs | Potential To Emit (tons/year) |
|---|---|
| Methyl Ethyl Ketone | 396.05 |
| TOTAL | 396.05 |

**Justification for Modification**

The Part 70 Operating permit is being modified through a Part 70 Minor Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12 (b).

**County Attainment Status**

The source is located in Marshall County.

| Pollutant | Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment) |
|---|---|
| PM-10 | Attainment |
| $SO_2$ | Attainment |
| $NO_2$ | Attainment |
| Ozone | Attainment |
| CO | Attainment |
| Lead | Attainment |

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and $NO_X$ emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Marshall County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

**Source Status**

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

| Pollutant | Emissions (tons/year) |
|---|---|
| PM | 12.8 |
| PM-10 | 13.5 |
| $SO_2$ | 0.056 |
| VOC | 249 |
| CO | 8.07 |
| NOx | 9.55 |
| HAPs | 150 |

(a) The limited emissions of the existing source are based on the Technical Support Document (TSD) for Part 70 Operating permit T099-7476-00033, issued on December 9, 1999.

(b) The existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

**Potential to Emit of Modification After Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

| | Potential to Emit (tons/year) | | | | | | |
|---|---|---|---|---|---|---|---|
| Process/facility | PM | PM-10 | $SO_2$ | VOC | CO | $NO_X$ | HAPs |
| Roll Coater | 0.0 | 0.0 | 0.0 | Less than 25 | 0.0 | 0.0 | Less than 10 |
| PSD Levels | 250 | 250 | 250 | 250 | 250 | 250 | - |

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

**Federal Rule Applicability**

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

**State Rule Applicability – Roll Coater**

326 IAC 8-2 (Surface Coating Emission Limitations)

The Roll Coater is used for applying adhesive to cellular or non-cellular polymeric substrates. Therefore the requirements of 326 IAC 8-2 are not applicable.

326 IAC 8-1-6 (New facilities; general reduction requirements)

Although the potential VOC emission from the roll coater is greater than 25 tons per year, the source has agreed to limit the VOC emission to less than twenty-five (25) tons per twelve (12) consecutive month period, rolled monthly. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 2-4.1-1 (New source toxics control)

The source has agreed to limit a single HAP to less than ten (10) tons and the combination of all HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, rolled monthly from the roll coater. Therefore, the requirements of this rule are not applicable.

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source=s failure to take the appropriate corrective actions within a specific time period.

**Conclusion**

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Permit Modification No. 099-12291-00033.

**Appendix A: Emissions Calculations**
**VOC and Particulate**
**From Coating Operations**

**Company Name:** **Bremen Corporation**
**Address City IN Zip:** **405 North Industrial Drive, Bremen, Indiana 46506**
**CP:** **099-12291**
**Plt ID:** **099-00033**
**Reviewer:** **Gurinder Saini**
**Date:** **08/02/00**

| Material | Density (Lb/Gal) | Weight % Volatile (H20 & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M6392 | 7.1 | 85.00% | 0.0% | 85.0% | 0.0% | 10.00% | 0.25000 | 60.000 | 6.04 | 6.04 | 90.65 | 2175.66 | 397.06 | 0.00 | 60.44 | 100% |

**State Potential Emissions** **Add worst case coating to all solvents** **90.65** **2175.66** **397.06** **0.00**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations**
**HAP Emission Calculations**

**Company Name:** Bremen Corporation
**Address City IN Zip:** 405 North Industrial Drive, Bremen, Indiana 46506
**CP#:** 099-12291
**Plt ID:** 099-00033
**Permit Reviewer:** Gurinder Saini
**Date:** 05/24/2000

| Material | Density (Lb/Gal) | Gallons of Material (gal/unit) | Maximum (unit/hour) | Weight % Methyl Ethyl Ketone | Methyl Ethyl Ketone Emissions (ton/yr) |
|---|---|---|---|---|---|
| | | | | | |
| M6392 | 7.1 | 0.250000 | 60.00 | 85.00% | 396.50 |

**Total State Potential Emissions** **396.5**

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs